



## RESEARCH ARTICLE

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# Opportunities for emotional intelligence in the context of nursing

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## ABSTRACT

**Introduction:** Emotional intelligence is the ability to recognize and control one's own emotions as well as emotions of other people. There are two orientations in studying emotional intelligence. They differ in whether they relate abilities and personal characteristic features or not. Emotional intelligence usage is currently being understood as a fundamental requirement of nursing in care provision to patients.

**Methods:** In a research conducted with a group of nursing students ( $n = 86$ ), we were examining emotional intelligence as an ability and as a feature. We used SIT-EMO (Situational Test of Emotional Understanding) scales in order to find out emotional intelligence as an ability, and SEIS (Schutte Emotional Intelligence Scale), measuring emotional intelligence as a feature. In the context of nursing, we were finding out emotional self-efficacy in relation to geriatric patients (ESE-GP). TEIQue-SF (Trait Emotional Intelligence Questionnaire – short form) method was used to set up our own questionnaire.

**Results:** We were finding out the extent of emotional intelligence and we were analyzing it from the viewpoint of its grasping as a feature, ability and emotional self-efficacy in relation to geriatric patients. We found out lower levels in social awareness, emotional management and stress management dimensions of the nursing students.

**Conclusion:** Emotional intelligence as an ability of the nursing students can be enhanced through psychological and social trainings. Emotional intelligence has an impact on social and communication skills, which are a precondition of effective nursing care.

**Keywords:** emotional intelligence, nursing students, relationship, geriatric patients

## INTRODUCTION

Emotional intelligence involves qualities like recognition of one's own feelings, ability to empathize

with other people and manage feelings in order to enhance quality of one's life. For standard as well as specific personality functioning, one needs not only intellectual abilities (decisions based on logic) but also abilities covered by emotional intelligence. Clear communication of one's own feelings and emotions can provide significant help in creating mutual relationship. Emotional intelligence models can be categorized into two groups: models of abilities and models of features, or combined models (1).

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Baumgartner et al. (2) state that the theory of Mayer, Salovey and Caruso provides a clear and logical concept of emotional intelligence. Connection of terms emotions and intelligence creates a specific psychological construct applicable in a determined sphere of human life, contrary to powerful theory by Goleman and too broad theory by Bar-On.

Petrides, Pérez and Furnham define conceptual framework of emotional intelligence as a personality feature (3). Salbot et al. (4) state that feature emotional intelligence appears to be a meaningful, relatively individual personality construct justified within research and diagnostic practice. They prefer the term own emotional efficiency, respectively emotional self-efficacy, similarly to Baumgartner, Zacharová (5). This term signifies potential for perception and processing of our own and other people's emotions, as well as potential for control and regulation of emotions.

In the nursing profession, competences of emotional intelligence in intrapersonal and interpersonal relationships are applied in parallel with cognitive competences. Emotional competences have mutual impact and are a condition of each other within their application. Lack of emotional intelligence competences becomes a restriction in actual application of not only expert knowledge but also intellectual abilities (6). Similarly, McCobe and Timmins (7) present a combination of cognitive and affective processes, which help in the nurse – patient interaction. Ilievová (6) draws attention to social intelligence and possibilities of its usage in the nursing care, as well as in education of nursing students. She refers to the need of conducting social and psychological training of nursing students in Slovakia. According to Dobšovič, Ilievová and Bekö (8), students enhance their abilities of communication, self-knowing, congruence, acceptance, empathy, stress management, self-reflection, and conflict solution through psychological and social training based on active social learning principles. They have a possibility to grow personally, develop their personal qualities, reveal and look for their own communication barriers and enhance their social competences. Ilievová (9) states that the nurse profession is a helping occupation whose demands reflect in physical, psychical and emotional sphere, and from the viewpoint of preparation for the profession and handling

professional performance, it ranks among the most demanding professions.

Por et al. (10) claim that evidence is ambiguous at present, and there are only a few empirical studies examining direct relationship between emotional intelligence and nursing care.

The aim of this study was to evaluate the level of emotional intelligence of full-time students in the nursing study program, bachelor degree study at the Faculty of Health and Social Care at the Trnava University, analyzing it from the viewpoint of its grasping as a characteristic feature or ability, and finding out emotional self-efficacy which relates to care about geriatric patients.

## METHODS

Data was collected from a sample of 86 respondents. Full-time students in the nursing study program in the bachelor degree study (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year of study – 4 men, 82 women; age:  $M = 21$ ;  $SD = 2.23$ ) at the Faculty of Health and Social Care of the Trnava University in Trnava were examined. Students attend 40 hours of psychological and social training during each semester. After completion of their studies, they attend 240 hours of psychological and social training based on the principles of active social learning. Data was collected in February 2012. Participation was anonymous and based on voluntary consent to participate in the study. Respondents were informed on the purpose of the study.

Emotional intelligence was examined through questionnaires representing the research aim:

1. SIT-EMO (Situational Test of Emotional Understanding) is framed as a performance examination. Examined persons are submitted descriptions of life situations with emotionally referenced information.
2. SEIS (Schutte Emotional Intelligence Scale) examines feature emotional intelligence on the basis of self-evaluation. We used a modified 41-item version. It contains more items with reversed scoring and is focused on the "emotions usage" factor.
3. Method of own structure examines emotional self-efficacy related to geriatric patients (ESE-GP) – this self-reflexive method carries a potential to bring information on internal processes

or experience and on typical behavior of respondents towards geriatric patients. The method comprises 27 items. Respondents express their level of agreement, respectively disagreement through a 5-point Likert scale. Its creation was inspired by TEIQue-SF (Trait Emotional Intelligence Questionnaire). It results from the model of emotional intelligence as a personality feature. The updated long version comprises 153 items, measures scores in 15 dimensions, 4 factors and overall emotional intelligence. Shorter version has 30 items also divided into 4 factors: well-being, self-control ability, emotionality, sociability.

### Statistical analysis

Data was processed in SPSS 15.0 statistical software. Descriptive statistics, correlation analysis, means comparison, factor analysis and reliability analysis are used in data processing.

Descriptive characteristics of the overall score of used methods are shown in Table 1.

Figure 1. shows descriptive characteristics of variable dimensions of ESE-GP. Based on medians, we can state that lower score is recorded in the dimensions of stress management, social awareness and emotional management (median 7). Based on analysis of dimensional variables division collected through ESE-GP, we can state that compared to standard division, score of these dimensions deviates towards higher values (so called left incline). Stress management dimension is an exception – it is right inclined. The overall ESE-GP score based of calculation using Kolmogorov-Smirnov test of normality can be considered as normally divided ( $p > 0.05$ ).

Internal consistency of all 27 original items in the method of own structure finding out emotional self-efficacy related to geriatric patients was  $\alpha = 0.722$ . Internal consistency was significantly lowered by item No. 20, which was not included in further calculations. It represented  $\alpha = 0.756$  (high internal consistency) in ESE-GP with 26 items. Correlation coefficient between 27 and 26-item version of ESE-GP is  $r = 0.974$ ,  $\text{sig} < 0.001$ . Internal consistency of 15 dimensions on the basis of Cronbach  $\alpha$  coefficient calculation is also high,  $\alpha = 0.752$ .

Table 2 presents results of factor analysis of 13 dimensions (adaptability and self-motivation were

omitted) (according to Salbot et al., 2011), however, these factors do not correspond with their finding.

Validity was verified by finding out relationship between SEIS and our ESE-GP method (Table 3). Pearson correlation coefficient was evaluated on the sample of 86 respondents, resulting in  $r = 0.469$ ,  $\text{sig} < 0.001$ , representing a moderate relationship.

No relationships were found between SIT-EMO, examining emotional intelligence as an ability, and ESE-GP ( $\text{sig} > 0.05$ ).

## RESULTS

TABLE 1. Descriptive characteristics of variables (N=86)

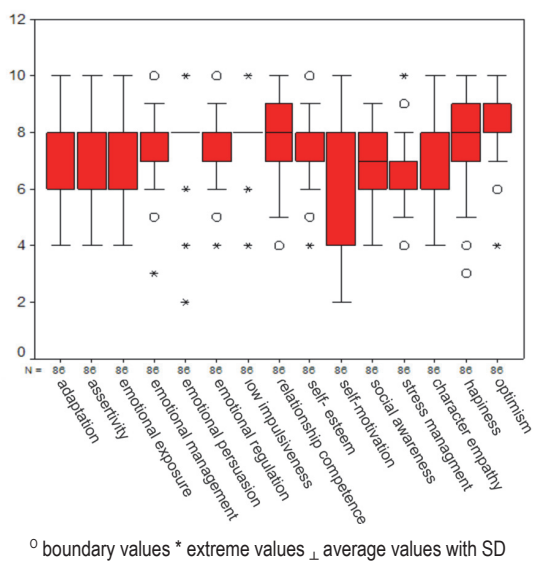
Score in methods	Minimum	Maximum	Average	SD	Median
SIT-EMO	7	18	12.94	2.88	13
SEIS	109	186	154.23	14.56	153.5
ESE-GP	71	117	97.26	8.45	98.5
Age of respondents	19	35	21.02	2.23	21

SD – standard deviation

TABLE 2. Factor analysis of ESE-GP

Dimensions	Factors of ESE-GP			
	1	2	3	4
Assertiveness	0.007	-0.102	0.001	0.847
Emotional expression	0.194	0.244	0.300	0.246
Emotional management	0.524	0.104	0.051	0.411
Emotional perception	-0.512	0.227	0.506	0.342
Emotional regulation	0.121	0.723	-0.107	0.301
Low impulsiveness	0.084	-0.085	0.843	-0.037
Relationship competence	0.073	0.636	-0.070	-0.034
Self-respect	0.752	0.078	0.320	0.076
Social awareness	0.656	0.055	-0.128	0.095
Stress management	0.368	0.243	0.074	0.499
Feature empathy	-0.053	0.632	0.333	0.010
Feature happiness	0.446	0.601	0.323	-0.262
Optimism	0.547	0.312	0.441	0.051
% of explained variation	17.18	15.34	12.39	11.48

Factor loadings of dimensions contained in obtained factors are underlined in the column of respective factors; 1 = sociability, 2 = emotionality, 3 = well-being, 4 = self-control.



**FIGURE 1.** Individual dimensions variables in ESE-GP (box plot)

**TABLE 3.** Relationships between scores of used methods

Pearson rho correlation coefficient	Sig.	Maximum
SIT-EMO – SEIS	-0.006	0.955
SIT-EMO – ESE-GP (26 items)	0.030	0.786
SEIS – ESE-GP (26 items)	*0.469	0.000
ESE-GP (7 deg.) – ESE-GP (26 items 5 deg.)	*0.974	0.000

\*p< 0.001

DISCUSSION

Four-factor structure was not confirmed in our method, whose creation was inspired by TEIQue-SF. Results of the factor analysis of our method are supported by findings of authors preferring grasping of feature emotional intelligence as a whole, not as a factor construct. Baumgartner, Molčanová and Chylová (11) state that results of factor analyses from various researches do not provide a clear picture of the questionnaire internal structure. SEIS can only evaluate determination of the overall emotional intelligence score. Nábělková (12) states, on the basis of statistical analysis of her study, that emotional intelligence factors (emotionality, sociability and self-control under TEIQue tool) as well as the overall global emotional intelligence can be consid-

ered as normally divided. The factor of well-being is an exception, showing left incline. Factors were not found in our method, and therefore we only use 15 dimensions divided according to Salbot (4). On the basis of medians, we state that lower score in ESE-GP was found in two dimensions: social awareness and emotional management. These dimensions according to Salbot are contained in sociability factor, focusing on social relationships and social impact, on individual as an agent in social contacts. Our findings suggest that students are convinced about restricted social skills in relation to geriatric patients. They feel anxious in unknown social surroundings like health care facilities (departments), as they are uncertain about how to behave. Their interpersonal skills are insufficient. Emotional management dimension (of the others) relates to the ability to cope with emotional states of the others. They are represented by states of geriatric patients in our study. Achieved lower score suggests that students are not able to influence and handle experiencing of geriatric patients (e.g. set them at ease, motivate them, and comfort them). They cannot make geriatric patients feel better when they need it.

Lower score in the stress management dimension enables us to feature that students have less developed stress management strategies in interaction with geriatric patients, and they might prefer avoiding situations in which they are potentially maximized.

By contrast, the highest score of students was achieved in optimism, feature happiness and relationship competence dimensions. First two dimensions are contained in the well-being factor, suggesting that students experience ease in connection with geriatric patients. They feel happy and positive in their presence. The optimism dimension should particularly express that students look at positive features of their relationship to geriatric patients and expect positive events in working with them.

Methods of feature emotional intelligence measurement mutually correlate quite strongly (13). SEIS method was in a moderate relationship with ESE-GP method within our study. Their specific characters were confirmed. Research of Baumgartner, Molčanová and Chylová (2) reported a similar finding. Statistically significant difference was found in SEIS-measured feature emotional intelligence for the benefit of medical personnel (n = 105). Emotional intelligence level they found in students (n =

134) was above the variable scales average value. Respondents in our research also had emotional intelligence score measured above the scales medians in methods we used. Por et al. (10) found average emotional intelligence score of ( $n = 130$ ) 124.9 (SD = 11.6) on the nursing students sample through SEIS.

Freshwater and Stickley (14) discuss the need to include emotional intelligence development in subjects within the nursing study program, which resulted from relationship found between the emotional intelligence level and nursing performance.

We suppose that educational institutions should have a long-term interest in development of abilities included in any emotional intelligence model. At the Faculty of Health and Social Care of Trnava University in Trnava, within full-time nursing study program, we have made changes since 2007/2008 regarding innovation and enhancement of education of students in the sphere of communication skills practice, while we adopted principles of the active social learning based on the theory of C. R. Rogers and A. H. Maslow. The principle of active social learning is applied in education through encounter groups aiming at personal growth, personal qualities development, revelation and looking for own communication barriers and enhancement of social competence. Education through the encounter groups method is carried out during six semesters of bachelor studies. It is a part of clinical practice training of students and their preparation for intense and helpful communication with patients. Student attends 40 hours of active social learning in each semester. The resulting effect of education in encounter group is emotional, cognitive and behavioral personal change and positive change regarding the nurse – patient relationship. The crucial criterion of assessment of nurse's work quality is also response in experiencing of patients, which decides on whether mutual relationship contributes to the atmosphere of trust or it worsens it. The idea of encounter groups brings a different approach towards human resources and preconditions of a learning person, and creates an own unique culture of a group process.

## CONCLUSION

We were finding out the emotional intelligence level of nursing students. We analyzed it from the

viewpoint of its grasping as a feature, ability and emotional self-efficacy in relation to geriatric patients. Through ESE-GP, we found a lower score in social awareness, emotional management and stress management dimensions regarding the nursing students. Our findings can be an impulse for enhancement and development of own emotional efficacy of nursing students through psychological and social trainings. Preliminary results of encounter groups monitoring suggest an increase in willingness to cooperate, suppression of defending behavior in communication with the others, increase in self-confidence and decline in evaluative behavior based on criticism. Encounter group is considered as one of the most effective forms of active social learning, since educational process is interconnected with emotional experiencing, and obtained knowledge and information are interconnected with particular emotions.

## COMPETING INTERESTS

The authors declare no conflict of interest.

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